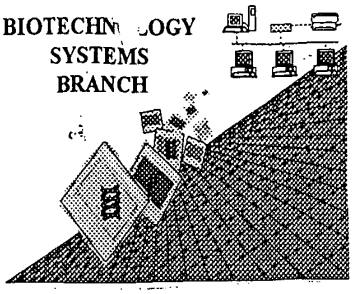
BIOTECHNOLOGY SYSTEMS BRANCH



16 C/
162
#18
RP
11-15-01

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

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NOV 1 3 2001
TECH CENTER 1600/2900

Application Serial Number: 09/155,708

Source: OIPE

Date Processed by STIC: 7/25/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

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Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/155,708

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. **If intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11 ✓	Use of <220>	Sequence(s) 12 missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n	n can only be used to represent a single **nucleotide** in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

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OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,708

DATE: 07/25/2001
TIME: 17:01:31

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\07252001\I155708.raw

Does Not Comply
Corrected Diskette Needed

```
     5 <110> APPLICANT: Farrar, Jane
     6       Humphries, Peter
     7       Kenna, Paul
     9 <120> TITLE OF INVENTION: Genetic Suppression and Replacement
    11 <130> FILE REFERENCE: MUR-003
    13 <140> CURRENT APPLICATION NUMBER: US 09/155,708
C--> 14 <141> CURRENT FILING DATE: 1999-04-05
    16 <150> PRIOR APPLICATION NUMBER: PCT/GB97/00929
    17 <151> PRIOR FILING DATE: 1997-04-02
    19 <160> NUMBER OF SEQ ID NOS: 28
    21 <170> SOFTWARE: PatentIn version 3.0

ERRORED SEQUENCES

   277 <210> SEQ ID NO: 8
   278 <211> LENGTH: (649) 648
   279 <212> TYPE: DNA
   280 <213> ORGANISM: mammalian
   282 <220> FEATURE:
W--> 283 <221> NAME/KEY: n
   284 <222> LOCATION: (1)..(649)
   285 <223> OTHER INFORMATION: any
   287 <400> SEQUENCE: 8
E--> 288 (cccctnnttettgtagcnc tgccaanaaa aaaggccagc tcacaggana antananaac  (60) 59
E--> 290 ccactgctta ctggcttanc naaattaata cgactcacta tagggagacc caagcttggc  120
E--> 292 acatctgatg agtccgtgag gacgaaaaaa ttggtctaca gggccctatt ctataatgtc  180
E--> 294 acctaaatgc tanagctcgc tgatcatcct cnactgtgcc ttctacttgc cagccntctn  240
E--> 296 ttgtttgccc ctccccccgtg ccttccttga ccctggaagg tgccactccc actgtccttt  300
E--> 298 cctaataaaa tgaggaaatt gcatcgcatt gtctgagtaa gtgtcattct attctggggg  360
E--> 300 gtggggtggg gcaggacnnc aaaggggaag attgggaaat acaatancca aggancnctc  420
E--> 302 ccccngggta attgcggatt nggctctntc gcttccttaa ggcngaaana aacaactngg  480
E--> 304 gcgctncggg gtttcccccn cccncccctnt tagcngcgca ttantcgccg cgggtgttgt  540
E--> 306 tgttactccc cacctnaacg ctacanttgc cagcgcctaa cgcccccccc tnctnttctt  600
E--> 308 ccctcctttc tcncacttcc ccggctttcc ccnccaancc naaatcngg               649
```

group of 9

nos. off

FYI

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

<210> 12
<211> 20
<212> DNA
<213> Artificial sequence

see item 11 on Eva Summary Sheet

<400> 12
catcttcagc ctgggactgt 20

VERIFICATION SUMMARY DATE: 07/25/2001
PATENT APPLICATION: **US/09/155,708** TIME: 17:01:32

Input Set : **A:\PTO_VSK.txt**
Output Set: **N:\CRF3\07252001\I155708.raw**

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:48 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:62 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:99 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:137 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:176 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/155,708

DATE: 07/25/2001
TIME: 17:01:32

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\07252001\I155708.raw

L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:212 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:245 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:283 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:288 M:254 E: No. of Bases conflict, LENGTH:Input:60 Counted:59 SEQ:8
M:254 Repeated in SeqNo=8
L:308 M:252 E: No. of Seq. differs, <211>LENGTH:Input:649 Found:648 SEQ:8
L:316 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:352 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:397 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:397 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:407 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:444 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14
L:479 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:514 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:553 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:592 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18